

WE CLAIM:

1. A telecommunications component comprising:
 - a circuit board;
 - a first multi-pair cable connector for inputting twisted pair, mixed data/voice signals to the circuit board;
 - a second multi-pair cable connector for outputting twisted pair, voice signals from the circuit board;
 - a third multi-pair cable connector for outputting twisted pair, data signals or mixed data/voice signals from the circuit board;
 - one or more card edge connectors connected to the circuit board, the one or more card edge connectors including:
 - a group of normally closed contacts;
 - a group of normally open contacts, all of the normally open contacts being grouped separately from the normally closed contacts;
 - first tracings provided on the circuit board for connecting the first multi-pair cable connector to the normally closed contacts;
 - second tracings provided on the circuit board for connecting the normally closed contacts to the second multi-pair cable connector;
 - third tracings provided on the circuit board for connecting the normally open contacts to the third multi-pair cable connector; and
 - the tracings being positioned such that none of the third tracings on the circuit board cross-over any of the first or second tracings.
2. The telecommunications component of claim 1, further comprising a splitter card adapted for connection to the one or more card edge connectors of the circuit board, the splitter card including a plurality of splitters for splitting the mixed data/voice signals into the data signals and the voice signals.
3. The telecommunications component of claim 2, wherein the splitters comprise POTS splitters.

4. The telecommunications component of claim 3, wherein the splitter card includes at least 24 of the POTS splitters.

5. The telecommunications component of claim 1, wherein the one or more card edge connectors include a first card edge connector and a separate second card edge connector, the first card connector including the normally closed contacts and the second card edge connector including the normally open contacts.

6. The telecommunications component of claim 5, further comprising a splitter card adapted for connection to the first and second card edge connectors of the circuit board, the splitter card including a plurality of splitters for splitting the mixed data/voice signals into the data signals and the voice signals.

7. The telecommunications component of claim 6, wherein the splitters comprise POTS splitters.

8. The telecommunications component of claim 7, wherein the splitter card includes at least 24 of the POTS splitters.

9. The telecommunications component of claim 1, further comprising a chassis including a reference back plane at which the first, second and third multi-pair cable connectors are positioned, the circuit board being aligned generally at a perpendicular orientation relative to the reference back plane.

10. The telecommunications component of claim 9, further comprising a splitter card adapted for connection to the one or more card edge connectors of the circuit board, the splitter card including a plurality of splitters for splitting the mixed data/voice signals into the data signals and the voice signals, the splitter card being aligned at a generally parallel orientation relative to the circuit board when the splitter card is connected to the one or more card edge connectors.

11. The telecommunications component of claim 10, wherein the splitters comprise POTS splitters.

12. The telecommunications component of claim 11, wherein the splitter card includes at least 24 of the POTS splitters.

13. The telecommunications component of claim 9, wherein the chassis includes opposing slots, wherein the circuit board is mounted in the slots.

14. The telecommunications component of claim 13, further comprising a splitter card adapted for connection to the one or more card edge connectors of the circuit board, the splitter card including a plurality of splitters for splitting the mixed data/voice signals into the data signals and the voice signals, the splitter card and the circuit board being mounted in the same opposing slots when the splitter card is connected to the circuit board by the first and second card edge connectors.

15. A telecommunications component comprising:

- a chassis defining a reference back plane;

- an interface card mounted at the reference back plane of the chassis, the interface card including:

- a circuit board positioned at an orientation generally perpendicular with respect to the back plane;

- a first multi-pair cable connector positioned at the back plane for inputting twisted pair, mixed data/voice signals to the circuit board;

- a second multi-pair cable connector positioned at the back plane for outputting twisted pair, voice signals from the circuit board;

- a third multi-pair cable connector positioned at the back plane for outputting twisted pair, data signals or mixed data/voice signals from the circuit board;

- one or more card edge connectors connected to the circuit board, the one or more card edge connectors including normally closed contacts and normally open contacts;

- first tracings provided on the circuit board for connecting the first multi-pair cable connector to the normally closed contacts;

- second tracings provided on the circuit board for connecting the normally closed contacts to the second multi-pair cable connector; and

third tracings provided on the circuit board for connecting the normally open contacts to the third multi-pair cable connector.

16. The telecommunications component of claim 15, further comprising a splitter card adapted for connection to the one or more card edge connectors of the circuit board, the splitter card including a plurality of splitters for splitting the mixed data/voice signals into the data signals and the voice signals, the splitter card being aligned at a generally parallel orientation relative to the circuit board when the splitter card is connected to the one or more card edge connectors.

17. The telecommunications component of claim 16, wherein the splitters comprise POTS splitters.

18. The telecommunications component of claim 17, wherein the splitter card includes at least 24 of the POTS splitters.

19. The telecommunications component of claim 15, wherein the chassis includes opposing slots, wherein the circuit board is mounted in the slots.

20. The telecommunications component of claim 19, further comprising a splitter card adapted for connection to the one or more card edge connectors of the circuit board, the splitter card including a plurality of splitters for splitting the mixed data/voice signals into the data signals and the voice signals, the splitter card and the circuit board being mounted in the same opposing slots when the circuit board and the splitter card are interconnected by the card edge connectors.

21. The telecommunications component of claim 15, wherein a plurality of the interface cards are mounted within the chassis.

22. The telecommunications component of claim 15, wherein the chassis is sized to hold a single one of the interface card.

23. The telecommunications component of claim 15, wherein all of the normally closed contacts are provided on a first card edge connector, and all of the normally open contacts are provided on a separate second card edge connector.

24. The telecommunications component of claim 23, further comprising a splitter card adapted for connection to the first and second card edge connectors, the splitter card including a plurality of splitters for splitting the mixed data/voice signals into the data signals and the voice signals, the splitter card being aligned at a generally parallel orientation relative to the circuit board when the splitter card is connected to the first and second card edge connectors.

25. The telecommunications component of claim 24, wherein the splitters comprise POTS splitters.

26. The telecommunications component of claim 25, wherein the splitter card includes at least 24 of the POTS splitters.

27. The telecommunications component of claim 23, further comprising a splitter card adapted for connection to the first and second card edge connectors, the splitter card including a plurality of splitters for splitting the mixed data/voice signals into the data signals and the voice signals, the splitter card and the circuit board being mounted in a common pair of opposing slots defined by the chassis. connectors.

sub a3 28. A splitter card comprising:
a circuit board;
a plurality of splitters mounted on the circuit board, each splitter being adapted for receiving a mixed voice and data signal and outputting a first signal that is voice only and a second signal that is either data only or mixed voice and data;
first tracings for transmitting the mixed voice and data signals from first contacts to the splitters;
second tracings for transmitting the first signals from the splitters to second contacts;

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third tracings for transmitting the second signals from the splitters to
third contacts; and
the first and second contacts being grouped separately from the third
contacts.

29. The splitter card of claim 28, wherein all of the first and second contacts are
provided on a first card edge extension that projects out from the circuit board, and all
of the third contacts are provided on a second card edge extension that projects outward
from the circuit board.

30. The splitter card of claim 28, wherein 24 of the splitters are provided on the circuit
board.

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